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In the Claims:

(Currently Amended) A method of producing a biocompatible 1. intraluminal prosthesis for in vivo use, comprising:

providing an intraluminal prosthesis having a portion thereof formed from polymeric material, wherein the polymeric material contains one or more toxic materials; immersing the polymeric material in a densified carbon dioxide composition such that the toxic materials are absorbed by the densified carbon dioxide composition,

wherein the carbon dioxide contains one or more of a co-solvent, a surfactant, and a cosurfactant; and

removing the densified carbon dioxide composition containing the toxic materials from the polymeric material, such that the intraluminal prosthesis is suitable for in vivo use.

- 2. (Original) The method of Claim 1, wherein the one or more toxic materials are selected from the group consisting of organic solvents (polar or non-polar), unpolymerized monomers, polymerization catalysts, oligomers, and polymerization initiators.
- (Original) The method of Claim 1, wherein the densified carbon 3. dioxide composition is a liquid composition, and wherein the immersing and removing steps are carried out in an enclosed chamber.
- (Original) The method of Claim 1, wherein the immersing step comprises adjusting the pressure and/or temperature of the densified carbon dioxide composition to selectively absorb toxic materials from the polymeric material.
- 5. (Original) The method of Claim 1, further comprising: lowering the density of the removed densified carbon dioxide composition such that the toxic materials entrained therein become separated therefrom; and removing the separated toxic materials.

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- 6. (Original) The method of Claim 5, wherein the step of lowering the density comprises reducing pressure and/or increasing temperature of the densified carbon dioxide composition.
- 7. (Original) The method of Claim 1, wherein carbon dioxide in the densified carbon dioxide composition is present in a supercritical state.
 - 8-10 (Cancelled)
- 11. (Original) The method of Claim 1, wherein the polymeric material is erodible.

12-13 (Cancelled)

- 14. (Original) The method of Claim 11, wherein the erodible polymeric material is selected from the group consisting of, surgical gut, silk, cotton, liposomes, poly(hydroxybutyrate), polycarbonate, polyacrylate, polyanhydride, polyethylene glycol, poly(ortho esters), poly(phosphoesters), polyesters, polyamides, polyphosphazenes, poly(pdioxane), poly(amino acid), polyglactin, erodible hydrogels, collagen, chitosan, poly(lactic acid), poly(L-lactic acid), poly(D,L-lactic acid), poly(glycolic acid), poly(D-lactic-coglycolic acid), poly(L-lactic-co-glycolic acid), poly(C-caprolactone), poly(valerolactone), poly(hydroxy butyrate), poly(hydrovalerate), polydioxanone, poly(propylene fumarate), poly(ethyleneoxide)-poly(butylenetetraphthalate), poly(lactic acid-co-lysine), poly(L-lactic acid) and poly(E-caprolactone) copolymers.
- 15. (Currently Amended) A method of producing a biocompatible stent intraluminal prosthesis for in vivo use, comprising:

providing <u>a stent</u> an intraluminal prosthesis having a portion thereof formed from polymeric material, wherein the polymeric material contains one or more toxic materials;

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immersing the polymeric material in a densified carbon dioxide composition such that the toxic materials are absorbed by the densified carbon dioxide composition, wherein pressure and/or temperature of the densified carbon dioxide composition is adjusted to selectively absorb toxic materials from the polymeric material;

removing the densified carbon dioxide composition containing the toxic materials from the polymeric material;

lowering the density of the removed densified carbon dioxide composition such that the toxic materials entrained therein become separated therefrom; and removing the separated toxic materials, such that the stent intraluminal prosthesis is suitable for in vivo use.

- (Original) The method of Claim 15, wherein the one or more toxic 16. materials are selected from the group consisting of organic solvents (polar or non-polar), unpolymerized monomers, polymerization catalysts, oligomers, and polymerization initiators.
- (Original) The method of Claim 15, wherein the densified carbon 17. dioxide composition is a liquid composition, and wherein the immersing and removing steps are carried out in an enclosed chamber.
- (Original) The method of Claim 15, wherein the step of lowering the 18. density comprises reducing pressure and/or increasing temperature of the densified carbon dioxide composition.
- 19. (Original) The method of Claim 15, wherein carbon dioxide in the densified carbon dioxide composition is present in a supercritical state.

20-21 (Cancelled)

(Original) The method of Claim 15, wherein the polymeric material is 22. erodible.

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23-25 (Cancelled)

- 26. (Original) The method of Claim 22, wherein the erodible polymeric material is selected from the group consisting of, surgical gut, silk, cotton, liposomes, poly(hydroxybutyrate), polycarbonate, polyacrylate, polyanhydride, polyethylene glycol, poly(ortho esters), poly(phosphoesters), polyesters, polyamides, polyphosphazenes, poly(pdioxane), poly(amino acid), polyglactin, erodible hydrogels, collagen, chitosan, poly(lactic acid), poly(L-lactic acid), poly(D,L-lactic acid), poly(glycolic acid), poly(D-lactic-coglycolic acid), poly(L-lactic-co-glycolic acid), poly(C-caprolactone), poly(valerolactone), poly(hydroxy butyrate), poly(hydroxalerate), polydioxanone, poly(propylene fumarate), poly(ethyleneoxide)-poly(butylenetetraphthalate), poly(lactic acid-co-lysine), poly(L-lactic acid) and poly(E-caprolactone) copolymers.
- 27. (New) A method of producing a biocompatible stent for *in vivo* use, comprising:

providing a stent having a portion thereof formed from polymeric material, wherein the polymeric material contains one or more toxic materials;

immersing the polymeric material in a densified carbon dioxide composition such that the toxic materials are absorbed by the densified carbon dioxide composition; and removing the densified carbon dioxide composition containing the toxic materials from the polymeric material, such that the stent is suitable for *in vivo* use.

- 28. (New) The method of Claim 27, wherein the one or more toxic materials are selected from the group consisting of organic solvents (polar or non-polar), unpolymerized monomers, polymerization catalysts, oligomers, and polymerization initiators.
- 29. (New) The method of Claim 27, wherein the densified carbon dioxide composition is a liquid composition, and wherein the immersing and removing steps are carried out in an enclosed chamber.

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- 30. (New) The method of Claim 27, wherein the immersing step comprises adjusting the pressure and/or temperature of the densified carbon dioxide composition to selectively absorb toxic materials from the polymeric material.
- 31. (New) The method of Claim 27, further comprising:
 lowering the density of the removed densified carbon dioxide composition such that the toxic materials entrained therein become separated therefrom; and removing the separated toxic materials.
- 32. (New) The method of Claim 31, wherein the step of lowering the density comprises reducing pressure and/or increasing temperature of the densified carbon dioxide composition.
- 33. (New) The method of Claim 27, wherein carbon dioxide in the densified carbon dioxide composition is present in a supercritical state.
- 34. (New) The method of Claim 27, wherein the polymeric material is erodible.
- 35. (New) The method of Claim 34, wherein the erodible polymeric material is selected from the group consisting of, surgical gut, silk, cotton, liposomes, poly(hydroxybutyrate), polycarbonate, polyacrylate, polyanhydride, polyethylene glycol, poly(ortho esters), poly(phosphoesters), polyesters, polyamides, polyphosphazenes, poly(pdioxane), poly(amino acid), polyglactin, erodible hydrogels, collagen, chitosan, poly(lactic acid), poly(L-lactic acid), poly(glycolic acid), poly(D-lactic-coglycolic acid), poly(L-lactic-co-glycolic acid), poly(C-caprolactone), poly(valerolactone), poly(hydroxy butyrate), poly(hydroxalerate), polydioxanone, poly(propylene fumarate), poly(ethyleneoxide)-poly(butylenetetraphthalate), poly(lactic acid-co-lysine), poly(L-lactic acid) and poly(€-caprolactone) copolymers.

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36. (New) A method of producing a biocompatible intraluminal prosthesis for in vivo use, comprising:

providing an intraluminal prosthesis having a portion thereof formed from polymeric material, wherein the polymeric material contains one or more toxic materials; masking one or more portions of the polymeric material;

immersing the polymeric material in a densified carbon dioxide composition such that the toxic materials are absorbed from unmasked portions of the polymeric material by the densified carbon dioxide composition; and

removing the densified carbon dioxide composition containing the toxic materials from the polymeric material, such that the intraluminal prosthesis is suitable for *in vivo* use.

- 37. (New) The method of Claim 36, wherein the one or more toxic materials are selected from the group consisting of organic solvents (polar or non-polar), unpolymerized monomers, polymerization catalysts, oligomers, and polymerization initiators.
- 38. (New) The method of Claim 36, wherein the densified carbon dioxide composition is a liquid composition, and wherein the immersing and removing steps are carried out in an enclosed chamber.
- 39. (New) The method of Claim 36, wherein the immersing step comprises adjusting the pressure and/or temperature of the densified carbon dioxide composition to selectively absorb toxic materials from the polymeric material.
- 40. (New) The method of Claim 36, further comprising:
 lowering the density of the removed densified carbon dioxide composition such that the toxic materials entrained therein become separated therefrom; and removing the separated toxic materials.

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- 41. (New) The method of Claim 40, wherein the step of lowering the density comprises reducing pressure and/or increasing temperature of the densified carbon dioxide composition.
- 42. (New) The method of Claim 36, wherein carbon dioxide in the densified carbon dioxide composition is present in a supercritical state.
- 43. (New) The method of Claim 36, wherein the polymeric material is erodible.
- 44. (New) The method of Claim 43, wherein the erodible polymeric material is selected from the group consisting of, surgical gut, silk, cotton, liposomes, poly(hydroxybutyrate), polycarbonate, polyacrylate, polyanhydride, polyethylene glycol, poly(ortho esters), poly(phosphoesters), polyesters, polyamides, polyphosphazenes, poly(pdioxane), poly(amino acid), polyglactin, erodible hydrogels, collagen, chitosan, poly(lactic acid), poly(L-lactic acid), poly(glycolic acid), poly(D-lactic-coglycolic acid), poly(L-lactic-co-glycolic acid), poly(L-lactic-co-glycolic acid), poly(C-caprolactone), poly(valerolactone), poly(hydroxy butyrate), poly(hydroxalerate), polydioxanone, poly(propylene fumarate), poly(ethyleneoxide)-poly(butylenetetraphthalate), poly(lactic acid-co-lysine), poly(L-lactic acid) and poly(C-caprolactone) copolymers.
- 45. (New) A method of producing a biocompatible intraluminal prosthesis for in vivo use, comprising:

providing an intraluminal prosthesis having a portion thereof formed from non-erodible polymeric material, wherein the polymeric material contains one or more toxic materials;

immersing the polymeric material in a densified carbon dioxide composition such that the toxic materials are absorbed by the densified carbon dioxide composition; and

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removing the densified carbon dioxide composition containing the toxic materials from the polymeric material, such that the intraluminal prosthesis is suitable for *in vivo* use.

- 46. (New) The method of Claim 45, wherein the one or more toxic materials are selected from the group consisting of organic solvents (polar or non-polar), unpolymerized monomers, polymerization catalysts, oligomers, and polymerization initiators.
- 47. (New) The method of Claim 45, wherein the densified carbon dioxide composition is a liquid composition, and wherein the immersing and removing steps are carried out in an enclosed chamber.
- 48. (New) The method of Claim 45, wherein the immersing step comprises adjusting the pressure and/or temperature of the densified carbon dioxide composition to selectively absorb toxic materials from the polymeric material.
- 49. (New) The method of Claim 45, further comprising:
 lowering the density of the removed densified carbon dioxide composition such that the toxic materials entrained therein become separated therefrom; and removing the separated toxic materials.
- 50. (New) The method of Claim 49, wherein the step of lowering the density comprises reducing pressure and/or increasing temperature of the densified carbon dioxide composition.
- 51. (New) The method of Claim 45, wherein carbon dioxide in the densified carbon dioxide composition is present in a supercritical state.
- 52. (New) A method of producing a biocompatible intraluminal prosthesis for *in vivo* use, comprising:

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providing an intraluminal prosthesis having a portion thereof formed from a coating of polymeric material, wherein the polymeric material contains one or more toxic materials;

immersing the polymeric material in a densified carbon dioxide composition such that the toxic materials are absorbed by the densified carbon dioxide composition; and removing the densified carbon dioxide composition containing the toxic materials from the polymeric material, such that the intraluminal prosthesis is suitable for in vivo use.

- 53. (New) The method of Claim 52, wherein the one or more toxic materials are selected from the group consisting of organic solvents (polar or non-polar), unpolymerized monomers, polymerization catalysts, oligomers, and polymerization initiators.
- 54. (New) The method of Claim 52, wherein the densified carbon dioxide composition is a liquid composition, and wherein the immersing and removing steps are carried out in an enclosed chamber.
- 55. (New) The method of Claim 52, wherein the immersing step comprises adjusting the pressure and/or temperature of the densified carbon dioxide composition to selectively absorb toxic materials from the polymeric material.
- 56. (New) The method of Claim 52, further comprising:
 lowering the density of the removed densified carbon dioxide composition such that the toxic materials entrained therein become separated therefrom; and removing the separated toxic materials.
- 57. (New) The method of Claim 56, wherein the step of lowering the density comprises reducing pressure and/or increasing temperature of the densified carbon dioxide composition.

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- 58. (New) The method of Claim 52, wherein carbon dioxide in the densified carbon dioxide composition is present in a supercritical state.
- 59. (New) The method of Claim 52, wherein the polymeric material is erodible.
- 60. (New) The method of Claim 59, wherein the erodible polymeric material is selected from the group consisting of, surgical gut, silk, cotton, liposomes, poly(hydroxybutyrate), polycarbonate, polyacrylate, polyanhydride, polyethylene glycol, poly(ortho esters), poly(phosphoesters), polyesters, polyamides, polyphosphazenes, poly(pdioxane), poly(amino acid), polyglactin, erodible hydrogels, collagen, chitosan, poly(lactic acid), poly(L-lactic acid), poly(L-lactic acid), poly(glycolic acid), poly(D-lactic-coglycolic acid), poly(L-lactic-co-glycolic acid), poly(C-caprolactone), poly(valerolactone), poly(hydroxy butyrate), poly(hydrovalerate), polydioxanone, poly(propylene fumarate), poly(ethyleneoxide)-poly(butylenetetraphthalate), poly(lactic acid-co-lysine), poly(L-lactic acid) and poly(E-caprolactone) copolymers.
- 61. (New) A method of producing a biocompatible intraluminal prosthesis for in vivo use, comprising:

providing an intraluminal prosthesis having a portion thereof formed from polymeric material, wherein the polymeric material contains one or more toxic materials; masking one or more portions of the polymeric material;

immersing the polymeric material in a densified carbon dioxide composition such that the toxic materials are absorbed from unmasked portions of the polymeric material by the densified carbon dioxide composition, wherein pressure and/or temperature of the densified carbon dioxide composition is adjusted to selectively absorb toxic materials from the polymeric material;

removing the densified carbon dioxide composition containing the toxic materials from the polymeric material;

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lowering the density of the removed densified carbon dioxide composition such that the toxic materials entrained therein become separated therefrom; and removing the separated toxic materials, such that the intraluminal prosthesis is suitable for *in vivo* use.

- 62. (New) The method of Claim 61, wherein the one or more toxic materials are selected from the group consisting of organic solvents (polar or non-polar), unpolymerized monomers, polymerization catalysts, oligomers, and polymerization initiators.
- 63. (New) The method of Claim 61, wherein the densified carbon dioxide composition is a liquid composition, and wherein the immersing and removing steps are carried out in an enclosed chamber.
- 64. (New) The method of Claim 61, wherein the step of lowering the density comprises reducing pressure and/or increasing temperature of the densified carbon dioxide composition.
- 65. (New) The method of Claim 61, wherein carbon dioxide in the densified carbon dioxide composition is present in a supercritical state.
- 66. (New) The method of Claim 61, wherein the polymeric material is erodible.
- 67. (New) The method of Claim 66, wherein the erodible polymeric material is selected from the group consisting of, surgical gut, silk, cotton, liposomes, poly(hydroxybutyrate), polycarbonate, polyacrylate, polyanhydride, polyethylene glycol, poly(ortho esters), poly(phosphoesters), polyesters, polyamides, polyphosphazenes, poly(pdioxane), poly(amino acid), polyglactin, erodible hydrogels, collagen, chitosan, poly(lactic acid), poly(L-lactic acid), poly(D,L-lactic acid), poly(C-lactic-co-glycolic acid), poly(L-lactic-co-glycolic acid), poly(C-lactic-co-glycolic acid)

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caprolactone), poly(valerolactone), poly(hydroxy butyrate), poly(hydrovalerate), polydioxanone, poly(propylene fumarate), poly(ethyleneoxide)-poly(butylenetetraphthalate), poly(lactic acid-co-lysine), poly(L-lactic acid) and poly(E-caprolactone) copolymers.

68. (New) A method of producing a biocompatible intraluminal prosthesis for *in vivo* use, comprising:

providing an intraluminal prosthesis having a portion thereof formed from non-crodible polymeric material, wherein the polymeric material contains one or more toxic materials;

immersing the polymeric material in a densified carbon dioxide composition such that the toxic materials are absorbed by the densified carbon dioxide composition, wherein pressure and/or temperature of the densified carbon dioxide composition is adjusted to selectively absorb toxic materials from the polymeric material;

removing the densified carbon dioxide composition containing the toxic materials from the polymeric material;

lowering the density of the removed densified carbon dioxide composition such that the toxic materials entrained therein become separated therefrom; and

removing the separated toxic materials, such that the intraluminal prosthesis is suitable for *in vivo* use.

- 69. (New) The method of Claim 68, wherein the one or more toxic materials are selected from the group consisting of organic solvents (polar or non-polar), unpolymerized monomers, polymerization catalysts, oligomers, and polymerization initiators.
- 70. (New) The method of Claim 68, wherein the densified carbon dioxide composition is a liquid composition, and wherein the immersing and removing steps are carried out in an enclosed chamber.

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- (New) The method of Claim 68, wherein the step of lowering the 71. density comprises reducing pressure and/or increasing temperature of the densified carbon dioxide composition.
- (New) The method of Claim 68, wherein carbon dioxide in the 72. densified carbon dioxide composition is present in a supercritical state.
- 73. (New) A method of producing a biocompatible intraluminal prosthesis for in vivo use, comprising:

providing an intraluminal prosthesis having a portion thereof formed from polymeric material, wherein the polymeric material contains one or more toxic materials;

immersing the polymeric material in a densified carbon dioxide composition such that the toxic materials are absorbed by the densified carbon dioxide composition, wherein pressure and/or temperature of the densified carbon dioxide composition is adjusted to selectively absorb toxic materials from the polymeric material, and wherein the carbon dioxide contains one or more of a co-solvent, a surfactant, and a co-surfactant;

removing the densified carbon dioxide composition containing the toxic materials from the polymeric material;

lowering the density of the removed densified carbon dioxide composition such that the toxic materials entrained therein become separated therefrom; and removing the separated toxic materials, such that the intraluminal prosthesis is suitable for in vivo use.

- (New) The method of Claim 73, wherein the one or more toxic 74. materials are selected from the group consisting of organic solvents (polar or non-polar), unpolymerized monomers, polymerization catalysts, oligomers, and polymerization initiators.
- 75. (New) The method of Claim 73, wherein the densified carbon dioxide composition is a liquid composition, and wherein the immersing and removing steps are carried out in an enclosed chamber.

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- 76. (New) The method of Claim 73, wherein the step of lowering the density comprises reducing pressure and/or increasing temperature of the densified carbon dioxide composition.
- 77. (New) The method of Claim 73, wherein carbon dioxide in the densified carbon dioxide composition is present in a supercritical state.
- 78. (New) The method of Claim 73, wherein the polymeric material is erodible.
- 79. (New) The method of Claim 22, wherein the erodible polymeric material is selected from the group consisting of, surgical gut, silk, cotton, liposomes, poly(hydroxybutyrate), polycarbonate, polyacrylate, polyanhydride, polyethylene glycol, poly(ortho esters), poly(phosphoesters), polyesters, polyamides, polyphosphazenes, poly(pdioxane), poly(amino acid), polyglactin, erodible hydrogels, collagen, chitosan, poly(lactic acid), poly(L-lactic acid), poly(D-L-lactic acid), poly(glycolic acid), poly(D-lactic-coglycolic acid), poly(L-lactic-co-glycolic acid), poly(C-caprolactone), poly(valerolactone), poly(hydroxy butyrate), poly(hydroxalerate), polydioxanone, poly(propylene fumarate), poly(ethyleneoxide)-poly(butylenetetraphthalate), poly(lactic acid-co-lysine), poly(L-lactic acid) and poly(C-caprolactone) copolymers.
- 80. (New) A method of producing a biocompatible intraluminal prosthesis for in vivo use, comprising:

providing an intraluminal prosthesis having a portion thereof formed from a coating of polymeric material, wherein the polymeric material contains one or more toxic materials;

immersing the polymeric material in a densified carbon dioxide composition such that the toxic materials are absorbed by the densified carbon dioxide composition,

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wherein pressure and/or temperature of the densified carbon dioxide composition is adjusted to selectively absorb toxic materials from the polymeric material;

removing the densified carbon dioxide composition containing the toxic materials from the polymeric material;

lowering the density of the removed densified carbon dioxide composition such that the toxic materials entrained therein become separated therefrom; and

removing the separated toxic materials, such that the intraluminal prosthesis is suitable for *in vivo* use.

- 81. (New) The method of Claim 80, wherein the one or more toxic materials are selected from the group consisting of organic solvents (polar or non-polar), unpolymerized monomers, polymerization catalysts, oligomers, and polymerization initiators.
- 82. (New) The method of Claim 80, wherein the densified carbon dioxide composition is a liquid composition, and wherein the immersing and removing steps are carried out in an enclosed chamber.
- 83. (New) The method of Claim 80, wherein the step of lowering the density comprises reducing pressure and/or increasing temperature of the densified carbon dioxide composition.
- 84. (New) The method of Claim 80, wherein carbon dioxide in the densified carbon dioxide composition is present in a supercritical state.
- 85. (New) The method of Claim 80, wherein the polymeric material is erodible.
- 86. (New) The method of Claim 85, wherein the erodible polymeric material is selected from the group consisting of, surgical gut, silk, cotton, liposomes, poly(hydroxybutyrate), polycarbonate, polyacrylate, polyanhydride, polyethylene glycol,

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poly(ortho esters), poly(phosphoesters), polyesters, polyamides, polyphosphazenes, poly(pdioxane), poly(amino acid), polyglactin, erodible hydrogels, collagen, chitosan, poly(lactic acid), poly(L-lactic acid), poly(D,L-lactic acid), poly(glycolic acid), poly(D-lactic-coglycolic acid), poly(L-lactic-co-glycolic acid), poly (D,L-lactic-co-glycolic acid), poly(€caprolactone), poly(valerolactone), poly(hydroxy butyrate), poly(hydroxalerate), polydioxanone, poly(propylene fumarate), poly(ethyleneoxide)-poly(butylenetetraphthalate), poly(lactic acid-co-lysine), poly(L-lactic acid) and poly(E-caprolactone) copolymers.